



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/520,933

10/14/2005

Gustave Paul Corten

2001-1371

4760

466

7590

11/20/2006

YOUNG & THOMPSON  
745 SOUTH 23RD STREET  
2ND FLOOR  
ARLINGTON, VA 22202

EXAMINER

LAZO, THOMAS E

ART UNIT

PAPER NUMBER

3745

DATE MAILED: 11/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/520,933		CORTEN ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Thomas E. Lazo		3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 32-62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 32-37, 41, 42, 45-55, 57 and 59-62 is/are rejected.
- 7) ☒ Claim(s) 38-40, 43, 44, 56 and 58 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 January 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____                                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/12/05</u> .   | 6) <input type="checkbox"/> Other: ____                           |

## **DETAILED ACTION**

### ***Drawings***

Figure 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

The disclosure is objected to because of the following informalities:

On page 4, line 33 – page 5, line 1, the reference to canceled claims should be removed.

Appropriate correction is required.

### ***Claim Objections***

Claims 37 and 61 are objected to because of the following informalities:

In claim 37, line 2, "on is" should be is --on--.

In claim 61, line 2, "this" should be --is--. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 32-62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "the normal situation" in claims 32 and 48 is a relative term which renders the claim indefinite. The term "the normal situation" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The property of the fluid having "higher kinetic energy" or "lower kinetic energy" or "differing" kinetic energy depends on the definiteness of this situation.

Regarding claim 32, the phrase "(sea)water and/or wind flows)" renders the claim indefinite because it is unclear whether all of the limitation(s) of the phrase are part of the claimed invention. See MPEP § 2173.05(d).

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required

feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claims 33, 37, 49-52, and 57 recite a broad recitation (e.g. 0.1, 5 degrees, less than 5 times, more than 5%, and greater than 10 degrees), and the claims also recite a narrower statement (e.g. 0.2, 10 degrees, less than 4 times, more than 10%, and greater than 20 degrees) of the range/limitation.

Regarding claim 34, the phrase "the strength and/or the scale" renders the claim indefinite because it is unclear whether all of the limitation(s) of the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Regarding claim 35, the phrase "optionally having" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claims 45 and 53 recite the limitation "the characteristic size" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 47, the phrase "for example" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

The phrase "optimization...with regard to the overall performance of the farm" in claim 61 is a vague which renders the claim indefinite. The phrase is not defined by the claim and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The optimization of performance is not clear as to what aspect of performance is being optimized and what feature of the invention carries out this optimization.

Regarding claim 62, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Regarding claims 36, 38-44, 46, 54-56, 58, 59, and 60, their dependence on indefinite claims renders the claims themselves indefinite.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 32, 33, 34, 36, 42, 43, 46-49, 54, 55, and 59-62, as far as they are definite, are rejected under 35 U.S.C. 102(b) as being anticipated by Sforza (4,047,832). Sforza discloses a method for extracting energy from a flowing fluid using an assembly of devices 140 positioned close to one another, a guiding device 130 of the assembly being set with respect to the fluid flow in such a way that as a result forces with a component perpendicular to the undisturbed direction of flow are exerted, such that fluid with kinetic energy is guided through an energy-extracting device 140 of the assembly, and a support construction 134 for the device, wherein the ratio between the generated force component perpendicular to and that parallel to the undisturbed direction of flow is more than 0.1, several guiding devices 130,131 cooperate in the generation of the same circulation, such that the circulation increases, the guiding device 130 is moved, the fluid guiding essentially takes place on the upstream side of the assembly, the ratio between the

force perpendicular to and that parallel to the undisturbed direction of flow exerted by guiding devices 130,131 in the direction of flow decreases in part of the assembly, a device 130 thereof has a guiding function for a downstream assembly 140, differences in density in the fluid are inherently applied by heating or by cooling (e.g. warm front or cold front) to generate the force, the guiding device 130 on average has an inclination of more than 5 degrees with respect to the device 140 for extracting energy from a fluid flow, active guiding devices 130,131 are installed outside the farm and essentially on the windward side with respect to the dominant wind direction, part of the support construction 134 of the guiding devices is provided with profiles by means of which a force perpendicular to the undisturbed fluid direction can be exerted in order to improve guiding, the assembly is controlled by means of software (Figure 10) that is self-learning, and the assembly is controlled by means of software (Figure 10) that also uses information on the stability of the atmosphere in order to set angles of tilt.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 41 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sforza. Sforza discloses all of the claimed subject matter except for guiding being such that the slow fluid is guided to the left in the northern hemisphere and to the right in the southern hemisphere and an offshore wind farm.

Official notice is taken that guiding flow to the left or right depending on which hemisphere the assembly is in and being offshore or on land are design location decisions that are matters of engineering expedience. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the assembly of Sforza to guide such that the slow fluid is guided to the left in the northern hemisphere and to the right in the southern hemisphere and to be an offshore wind farm as a matter of engineering expedience.

***Allowable Subject Matter***

Claims 38, 39, 40, 43, 44, 56, and 58 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 35, 37, 45, 50-53, and 56-58 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Prior Art***

Prior art made of record but not relied upon is considered pertinent to Applicant's disclosure and consists of seven patents.

Tharp, Wobben '567, Selsam, Wobben '097, Hickey, Dipnall, and Loth are cited to show energy extracting assemblies.

***Contact Information***

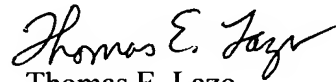


Art Unit: 3745

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Thomas Lazo whose telephone number is (571) 272-4818. The examiner can normally be reached on Monday-Friday from 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Edward Look, can be reached on (571) 272-4820. The fax phone number for this Group is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thomas E. Lazo  
Primary Examiner  
Art Unit 3745  
November 8, 2006